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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/690,656

10/22/2003

Ahti Muhonen

042933/269768

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12/23/2008

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EXAMINER

DAILEY, THOMAS J

ART UNIT

PAPER NUMBER

2452

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/690,656	Applicant(s) MUHONEN ET AL.	
	Examiner Thomas J. Dailey	Art Unit 2452	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9 and 11-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9, and 11-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7, 9, and 11-39 are pending.

Response to Arguments

2. The claim objections have been withdrawn in view of the applicant's entered amendments.
3. Applicant's arguments filed September 22, 2008 have been fully considered but they are not persuasive.
4. The applicant argues with respect to claims 1, 12, 19, 29, and 39 that Pecus (US Pat. 7,130,908) fails to disclose a remote network entity configured to at least partially control storage of content in memory of the terminal based upon the status of the content received from the terminal, and a client expiration time and deletion priority value associated with the content.
5. The examiner disagrees and notes in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., at least partially control storage of content in memory of the terminal based upon the status of the content received from the terminal, and *a client expiration time and deletion priority value associated with the content*, emphasis added) are

Art Unit: 2452

not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Specially, claims 1, 12, 19, 29, and 39 substantially recite, "each piece of content is *associated with parameters including a client expiration time and a deletion priority value*" (e.g. claim 12, lines 4-5, emphasis added) and "wherein the processor is also configured to send one of more instructions to the terminal *based upon the status and the associated parameters* to at least partially control the storage of the at least one piece of content in memory of the terminal" (e.g. claim 12, lines 5-8, emphasis added.) That is to say, because the associated parameters only include a client expiration time and a deletion priority value (i.e. the associated parameter are not strictly limited to those two parameters) and the instructions are dependent on the status and the associated parameters; the instructions need not necessarily be dependent upon the client expiration time and the deletion priority value when giving the claim's their broadest reasonable interpretation.

6. The applicant argues with respect to claims 2-5, 7, 14-16, 21-23, 30-33 and 35 that there is no apparent reason to combine the teachings of Pecus (US Pat. 7,130,908) and Deo (US Pat. 6,157,982).

Art Unit: 2452

7. The examiner disagrees and notes, as stated in the previous action, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Pecus and Deo in order to decrease the processing burden of a terminal that has less processing power available than a computer it is networked with (Deo, column 2, line 65-column 3, line 4).
8. The applicant argues with respect to claims 2, 13, 20, and 30 that the combination of Pecus and Deo fails to disclose a comparison of the deletion priority values of a plurality of pieces of content stored in memory.
9. The examiner disagrees. Pecus discloses determining if memory of the terminal has sufficient storage capacity for at least one subsequent piece of content (column 17, lines 11-14), and if memory does not have sufficient storage capacity deleting at least one piece of content based upon a comparison of the deletion priority values of a plurality of pieces of content stored in memory of the terminal (column 17, lines 20-24, the data manager checks for files marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted).
10. The applicant argues with respect to claims 3, 4, 14, 15, 21, 22, 31, and 32, 30 that the combination of Pecus and Deo fails to disclose a

Art Unit: 2452

determining content having an exceed client expiration time, and from that content, sending or receiving instructions to delete content having the highest deletion priority value from the comparison of the deletion priority values.

11. The examiner disagrees. Pecus and Deo discloses, as substantially recited in the claims, determining a plurality of pieces of content having an exceeded client expiration time (Pecus, column 17, lines 15-20, "expired files" are identified), identifying a piece of content having a highest deletion priority value from a comparison of the deletion priority values of the pieces of content having an exceeded client expiration time (column 17, lines 20-24, the data manager checks for file(s) marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted, "true" being the highest value for deletion priority; further, as all files are checked those that are expired will also be checked), and send one or more instructions instructing the terminal to delete the identified piece of content (Pecus, column 17, lines 15-28, if files are both expired and have are marked for forced deletion, they will be deleted).

12. The applicant argues with respect to claims 5, 16, 23, and 33 that the combination of Pecus and Deo fails to disclose when memory of the terminal does not have sufficient storage capacity for at least one

Art Unit: 2452

subsequent piece of content and each piece of content having an exceeded client expiration time has been identified and deleted, the processor is further configured to identify at least one piece of content having a highest deletion priority value from a comparison of the deletion priority values of any pieces of content remaining in memory of the terminal, and send one or more instructions instructing the terminal to delete the identified at least one piece of content.

13. The examiner disagrees. Pecus and Deo disclose when memory of the terminal does not have sufficient storage capacity for at least one subsequent piece of content and each piece of content having an exceeded client expiration time has been identified and deleted (see claim 4 rejection and response to arguments), the processor is further configured to identify at least one piece of content having a highest deletion priority value from a comparison of the deletion priority values of any pieces of content remaining in memory of the terminal column 17, lines 20-24, the data manager checks for file(s) marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted, "true" being the highest value for deletion priority), and send one or more instructions instructing the terminal to delete the identified at least one piece of content (Pecus, column 17, lines 15-28).

14. The applicant argues with respect to claims 7, 25, and 35 that the combination of Pecus and Deo fail to disclose a server expiration time as recited in the claims.
15. The examiner disagrees. Pecus discloses the processor is further configured to monitor the server expiration time of the at least one piece of content in memory of the apparatus to determine if at least one piece of content has an exceeded server expiration time (Pecus, column 17, lines 15-28, expiration times may be relative to different clocks, e.g. system or network as recited on line 19-20), and if at least one piece of content has an exceeded server expiration time, delete the at least one piece of content having an expired server expiration time (Pecus, column 17, lines 15-28).

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claims 1, 6, 9, 11-13, 17-20, 24-29, 34, 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by Pecus et al (US Pat. 7,130,908), hereafter "Pecus."

18. As to claim 12, Pecus discloses an apparatus comprising:

a processor operable within a terminal and configured to send, to a network entity located remote from the terminal, a status of at least one piece of content stored in memory of the terminal (column 22, lines 37-59, edge node (terminal) responds to requests from NOC (network entity) with information related to the status of content stored at the edge node), each piece of content being associated with parameters including a client expiration time and a deletion priority value (column 17, lines 35-41, files stored on the edge node have expiration times and deletion indications (deletion priority value)),

wherein the processor is configured to receive one or more instructions from the network entity based upon the status and the associated parameters to at least partially control storage of the at least one piece of content in memory of the terminal (column 16, lines 7-17, NOC (network entity) sends messages to the edge nodes (terminal) to delete files and data).

Art Unit: 2452

19. As to claims 1, 19, 29, and 39, they are rejected by the same rationale set forth in claim 12's rejection.

20. As to claim 6, Pecus discloses the invention substantially with regard to the parent claim 1, and further discloses the apparatus configured to store at least one piece of content, wherein the parameters further include a server expiration time (column 17, lines 15-20), and wherein the processor is configured to send at least one piece of content to the terminal (column 11, lines 40-50, NOC receives data and forwards it to the edge nodes).

21. As to claims 9, 11, 17, 26, and 36, Pecus discloses the processor is configured to associate each piece of content stored in the memory is associated with respective parameters (column 17, lines 20-28).

22. As to claims 13 and 20 Pecus discloses the processor is configured to receive one or more instructions to delete at least one piece of content based upon the deletion priority value of each piece of content stored in memory (column 17, lines 11-14), the processor being configured to receive the one or more instructions if, based on a determination if memory has sufficient storage capacity for at least one subsequent piece of content, the memory does not have sufficient storage capacity (column 17, lines 20-24, the data manager checks for files marked for forced

Art Unit: 2452

deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted).

23. As to claims 18, 27, and 37, Pecus discloses the processor is configured set a deletion priority value for at least one piece of content (column 17, lines 20-28).

24. As to claims 24, Pecus discloses receiving at least one piece of content at the network entity; and sending at least one piece of content to the terminal such that the terminal receives, and thereafter stores, the at least one piece of content (column 11, lines 40-50, NOC receives data and forwards it to the edge nodes).

25. As to claims 25, Pecus discloses the parameters further includes include a server expiration time (Pecus, column 17, lines 15-20), and wherein the method further comprises:

monitoring the server expiration time of the at least one piece of content in memory of the network entity to determine if at least one piece of content has an exceeded server expiration time (Pecus, column 17, lines 15-20); and

if at least one piece of content has an exceeded server expiration time, deleting the at least one piece of content having an expired server expiration time (Pecus, column 17, lines 15-20).

26. As to claims 28 and 38, Pecus discloses associating each piece of content comprises associating each piece of content stored in memory of the terminal with respective parameters at the network entity (column 17, lines 20-28).

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claims 2-5, 7, 14-16, 21-23, 30-33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecus in view of Deo et al (US Pat. 6,157,982), hereafter "Deo."

29. As to claims 2 and 30, Pecus discloses the invention substantially with regard to the parent claims 1 and 29, and further determining if memory of the terminal has sufficient storage capacity for at least one subsequent piece of content (column 17, lines 11-14), and if memory does not have sufficient storage capacity deleting at least one piece of content based upon a comparison of the deletion priority values of a plurality of pieces of content stored in memory of the terminal (column 17, lines 20-24, the data

manager checks for files marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted).

But, Pecus fails to disclose that a processor, located remotely from the terminal, carrying out the determining and sending steps. Rather, Pecus discloses these steps are carried out by the edge node (reading on the terminal), not the NOC (reading on the apparatus), see column 17, lines 1-10. However, Pecus does disclose that the NOC is functionally capable of sending instructions to the edge node, including delete instructions (column 22, lines 30-38).

Further, Deo discloses sending one or more instructions from a processor to a remote terminal based upon the status of the content stored in memory to at least partially control storage at least one piece of content in memory of the terminal, said instruction including determining available memory capacity of the terminal and if said memory does not have sufficient storage capacity deleting content (column 3, lines 8-24, a computer (apparatus) remotely issues memory transactions (instructions) to a information device (terminal), those instructions being based upon the content of the information device's memory, and the computer (apparatus) determines how much space is available as it has a map of the device memory in its own memory).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Pecus and Deo in order to decrease the processing burden of a terminal that has less processing power available than a computer it is networked with (Deo, column 2, line 65-column 3, line 4).

30. As to claim 3, Pecus and Deo disclose the invention substantially with regard to the parent claim 2, and further disclose determining a plurality of pieces of content having an exceeded client expiration time (Pecus, column 17, lines 15-20, "expired files" are identified), identifying a piece of content having a highest deletion priority value from a comparison of the deletion priority values of the pieces of content having an exceeded client expiration time (column 17, lines 20-24, the data manager checks for file(s) marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted, "true" being the highest value for deletion priority; further, as all files are checked those that are expired will also be checked), and send one or more instructions instructing the terminal to delete the identified piece of content (Pecus, column 17, lines 15-28, if files are both expired and have are marked for forced deletion, they will be deleted).

31. As to claim 4, Pecus and Deo disclose the invention substantially with regard to the parent claim 3, and further disclose the process is configured to repeatedly identify a piece of content, and send one or more instructions to instruct the terminal to delete the identified piece of content (Pecus, column 17, lines 15-28), until one of memory of the terminal has sufficient storage capacity for the at least one subsequent piece of content (Pecus, column 17, lines 15-28), or each piece of content having an exceeded client expiration time has been identified and deleted (Pecus, column 17, lines 15-28).

32. As to claim 5, Pecus and Deo disclose the invention substantially with regard to the parent claim 4, and further disclose when memory of the terminal does not have sufficient storage capacity for at least one subsequent piece of content and each piece of content having an exceeded client expiration time has been identified and deleted (see claim 4 rejection and response to arguments), the processor is further configured to identify at least one piece of content having a highest deletion priority value from a comparison of the deletion priority values of any pieces of content remaining in memory of the terminal column 17, lines 20-24, the data manager checks for file(s) marked for forced deletion; i.e. a plurality of files' forced deletion flag is compared with the Boolean value "true" to determine if they should be deleted, "true" being the highest value for deletion priority), and send one or more instructions

Art Unit: 2452

instructing the terminal to delete the identified at least one piece of content (Pecus, column 17, lines 15-28).

33. As to claim 7, Pecus and Deo disclose the invention substantially with regard to the parent claim 6, and further disclose the processor is further configured to monitor the server expiration time of the at least one piece of content in memory of the apparatus to determine if at least one piece of content has an exceeded server expiration time (Pecus, column 17, lines 15-28, expiration times may be relative to different clocks, e.g. system or network as recited on line 19-20), and if at least one piece of content has an exceeded server expiration time, delete the at least one piece of content having an expired server expiration time (Pecus, column 17, lines 15-28).

34. As to claims 14, 15, 21, 22, 31, and 32 they are rejected by a similar rationale to that set forth in claims 3 and 4's rejections.

35. As to claims 16, 23, and 33, they are rejected by a similar rationale to that set forth in claim 5's rejection.

36. As to claims 34, Pecus and Deo disclose the invention substantially with regard to the parent claim 30, and further disclose receiving at least one piece of content at the network entity; and sending at least one piece of

Art Unit: 2452

content to the terminal such that the terminal receives, and thereafter stores, the at least one piece of content (Pecus, column 11, lines 40-50, NOC receives data and forwards it to the edge nodes).

37. As to claim 35, it is rejected by a similar rationale to that set forth in claims 7's rejection.

Conclusion

38. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

39. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

Art Unit: 2452

41. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on 571-272-3964.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

42. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2452

/Kenny S Lin/
Primary Examiner, Art Unit 2452